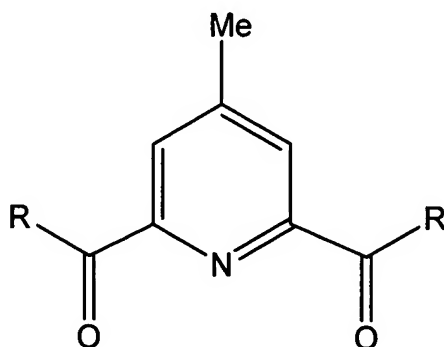


## AMENDMENTS TO THE CLAIMS

### Claims 1-10 (Cancelled)

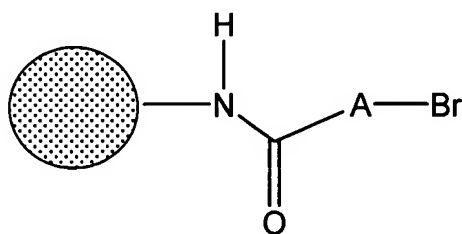
11. (New) A method for preparing a supported catalyst component for the production of hollow beads of polyethylene comprising:

(a) providing a first component characterized by the formula:



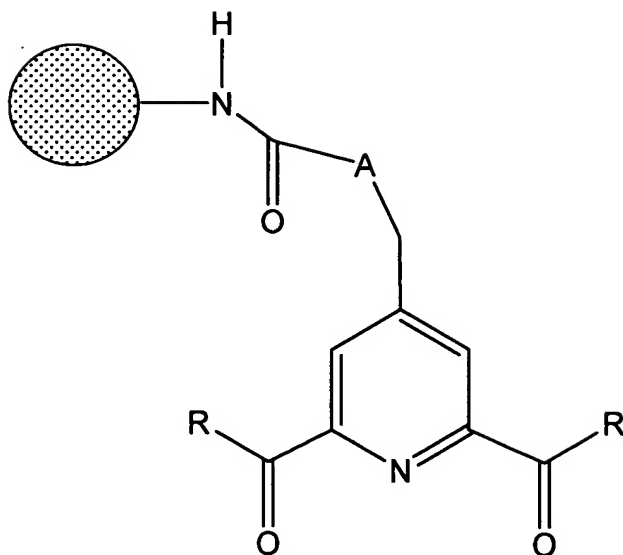
wherein R is an alkyl group having from 1 to 20 carbon atoms;

(b) providing a porous functionalized bead of polystyrene characterized by the formula:

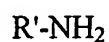


wherein A is a substituted or unsubstituted alkyl group having from 2 to 18 carbon atoms providing a flexible arm;

(c) creating a covalent bond between the component of subparagraph (a) and the porous functionalized bead of subparagraph (b) to produce a complex characterized by the formula:



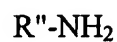
(d) providing a first alkyl- or aryl-amine characterized by the formula:



wherein:

R' is an alkyl group having from 1 to 20 carbon atoms, a substituted aryl group, or a substituted aryl group having substituents having from 1 to 20 carbon atoms;

(e) providing a second alkyl- or aryl-imine characterized by the formula:

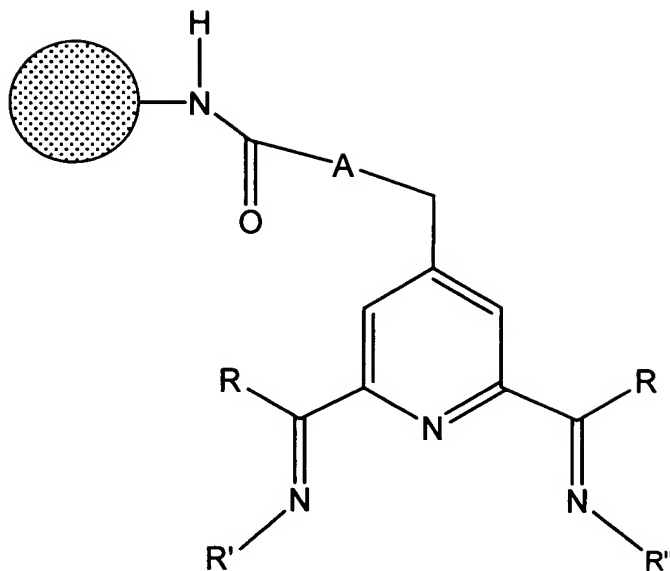


wherein:

R'' is an alkyl group having from 1 to 20 carbon atoms, a substituted aryl group, or a substituted aryl group having substituents having from 1 to 20 carbon atoms;

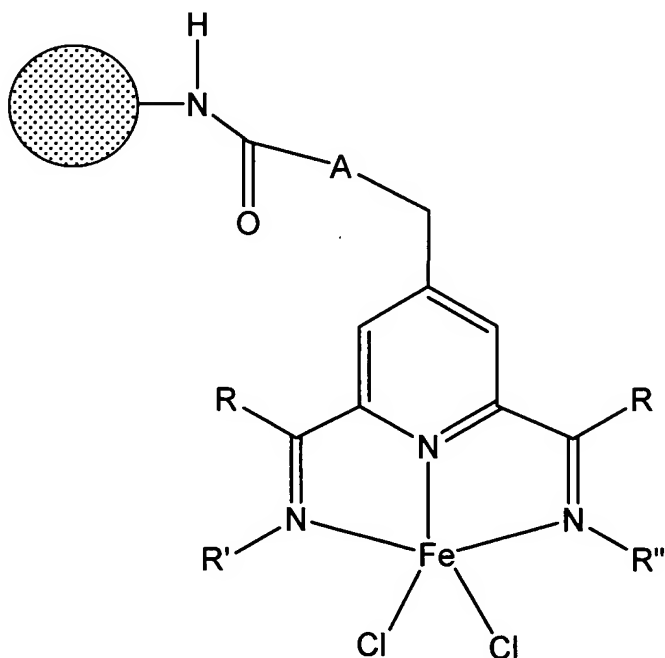
provided that R'' may be the same or different as R';

(f) reacting the complex of subparagraph (c) with said first and second alkyl- or aryl-amines of subparagraphs (d) and (e) to produce a bis-imine complex characterized by the formula:



wherein R, R' and R'' are as defined above and R' and R'' may be the same or different; and

(g) reacting the bis-imine of subparagraph (f) with ferric chloride in a solvent to produce a catalyst component characterized by formula:



wherein R, R' and R'' are as defined above.

12. **(New)** The method of claim 11 wherein the alkyl group A contains from 3 to 6 carbon atoms.

13. **(New)** The method of claim 11 wherein R is an alkyl group having from 1 to 4 carbon atoms.

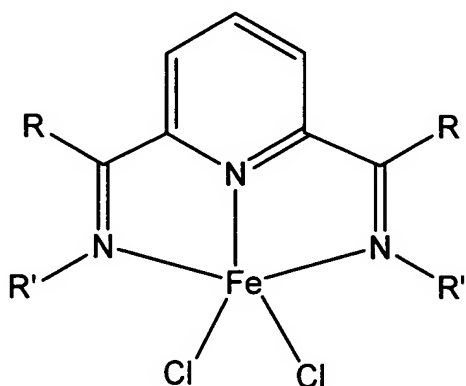
14. **(New)** The method of claim 11 wherein R' and R'' are the same and are substituted or unsubstituted phenyl groups.

15. **(New)** The method of claim 14 wherein said phenyl groups are substituted with isopropyl groups at positions 2 and 6.

16. **(New)** The method of claim 14 wherein said phenyl groups are substituted with methyl groups at positions 2, 4 and 6.

17. (New) A method for preparing hollow beads of polyethylene comprising:

(a) providing a supported catalyst component in which the support is a porous functionalized bead of polystyrene and the catalyst component is covalently bound to the support and is an ion-based complex characterized by the formula:



wherein:

R is an alkyl group having from 1 to 20 carbon atoms;

R' is an alkyl group having from 1 to 20 carbon atoms, an unsubstituted aryl group or a substituted aryl group having substituents having from 1 to 20 carbon atoms;

R'' is an alkyl group having from 1 to 20 carbon atoms, an unsubstituted aryl group or a substituted aryl group having substituents having from 1 to 20 carbon atoms;

provided that R'' may be the same or different as R';

(b) activating the supported catalyst component with an activating agent;

(c) feeding an ethylene monomer to a reaction zone containing said activated supported catalyst component;

(d) maintaining said reaction under polymerization conditions; and

(e) retrieving hollow beads of polyethylene from said reaction zone.

18. (New) The method of claim 17 wherein said activating agent is an alumoxane.

19. (New) The method of claim 18 wherein said activating agent is methylalumoxane.

20. (New) The method of claim 17 wherein said activating agent is an aluminum alkyl.

21. (New) The method of claim 20 wherein said aluminum alkyl is diethylaluminum chloride.